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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,052	12/04/2003	Shahab M. Sayeedi	CE11765R	8941
22917 MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD IL011/3RD SCHAUMBURG, IL 60196	7590 03/26/2010		EXAMINER JAIN, RAJ K	
			ART UNIT 2472	PAPER NUMBER
			NOTIFICATION DATE 03/26/2010	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Docketing.US@motorola.com

Office Action Summary

Application No.

10/728,052

Applicant(s)

SAYEEDI, SHAHAB M.

Examiner

RAJ JAIN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-18, 25-27 and 29-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-18, 25-27 and 29-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15-18, 25-27 and 29-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumar et al. (USP 6,757,270 B1) in view of Cao et al (US 20030195003 A1).

Regarding claim(s) 15, 33, 42 and 48 Kumar teaches a method for providing forward link packet data service to mobile stations (MSs) in a mobile communication system (Fig.1, abstract)), the method comprising:

providing, by a source base station (BS) (Figs. 4-5, primary BS as source), data for transmission to the MS via a forward link (data transmitted to MS(active) as shown in Fig. 5A; BS transmits data bursts via forward link to MS; col 15 lines 65 - 67); receiving an indication that the MS intends to switch from a forward link of a serving cell to a forward link of a target cell for data transmission service (Fig. 9, illustrates reverse link two way soft handoff, in other words from source BS to target BS where the mobile informs the source BS it's intention of moving to target BS; see also Fig. 5b; col 15 lines 17-23).

Kumar fails to disclose wherein the target cell is presently unavailable to provide data transmission service to the MS via the forward link of the target cell and providing such indication to the MS via the forward link of the target cell.

Cao discloses wherein the target cell is presently unavailable to provide data transmission service to the MS via the forward link of the target cell and providing such indication to the MS via the forward link of the target cell (Fig. 1; abstract; Paras 6,10,11,15 and 16; claims 1 and 6).

Base station resource allocation allows for reduced probability of handover failure or drop of communications if a channel is available from the target cell or otherwise a non-available channel indication is sent to the mobile accordingly.

Thus it would have been obvious at the time the invention was made to incorporate the teachings of Cao within Kumar so as to improve handover processing without drop in communications of a traversing mobile unit from one station to another.

Regarding claim(s) 16, Kumar discloses wherein receiving the indication that the MS intends to switch comprises receiving the indication by the source BS from the MS via the serving cell and wherein the source BS comprises the serving cell and is a serving BS of the MS (see Fig. 6, col 15 lines 39-63; col 16 lines 1-27)..

Regarding claim(s) 17 and 27, Kumar discloses wherein receiving the indication that the MS intends to switch comprises receiving the indication by the source BS from a serving BS and wherein the serving BS comprises the serving cell (Fig. 6, col 15 lines 39-63; col 16 lines 1-27).

Regarding claim(s) 18, Kumar discloses wherein receiving the indication that the MS intends to switch comprises receiving the indication by the source BS from a target BS and wherein the target BS comprises the target cell (Fig. 9, illustrates reverse link two way soft handoff, in other words from source BS to target BS where the mobile informs the source BS it's intention of moving to target BS; col 15 lines 17-23).

Regarding claim(s) 25, Kumar discloses determining whether the target cell is presently available to provide data transmission service to the MS via the forward link of the target cell comprises sending an indication to a target BS that the MS intends to switch to the forward link of the target cell for data transmission service (general specs the procedure for switching BS is via the handoff procedures). Cao discloses wherein the target cell is presently unavailable to provide data transmission service to the MS via the forward link of the target cell and providing such indication to the MS via the forward link of the target cell (Fig. 1; Paras 6,10,11,15 and 16; claims 1 and 6).

Regarding claim(s) 29, 30, 37, 47, and 51 Kumar discloses sending the indication to the MS that the target cell is presently unavailable to provide data transmission service to the MS via the forward link of the target cell comprises sending the indication

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to the MS via a forward packet data control channel (F-PDCCH) of the serving cell (col 2 lines 16-22).

Regarding claim(s) 26, and 36, Kumar discloses determining whether the cell is presently available to provide data transmission service to the MS via the forward link of the cell comprises receiving an indication that the cell is presently unavailable to provide data transmission service to the MS via the forward link of the cell (col 18 lines 60-65).

Regarding claim(s) 31, 32, 39, 40, 45, 46, 49, and 50, Kumar discloses indicating to the MS that the cell will not provide data transmission service to the MS via the forward link comprises sending, by the cell, a Universal Handoff Direction message (UHDM) that indicates that the cell does not support a forward link (col 10 lines 6-24, primary base station active set indicates cells which inherently provide transmission on the forward and/or reverse links to appropriate mobiles).

Regarding claim(s) 34, 35, Kumar discloses determining whether the cell is presently available comprises determining, when creating an active set for the MS, whether the cell is presently available to provide data transmission service to the MS via the forward link of the cell (col 11 lines 30-52).

Regarding claim(s) 38, 41 and 43, Kumar fails to disclose wherein the target cell is presently unavailable to provide data transmission service to the MS via the forward link of the target cell and providing such indication to the MS via the forward link of the target cell.

Cao discloses wherein the target cell is presently unavailable to provide data transmission service to the MS via the forward link of the target cell and providing such indication to the MS via the forward link of the target cell (Fig. 1; Paras 6,10,11,15 and 16; claims 1 and 6).

Base station resource allocation allows for reduced probability of handover failure or drop of communications if a channel is available from the target cell or otherwise a non-available channel indication is sent to the mobile accordingly.

Thus it would have been obvious at the time the invention was made to incorporate the teachings of Cao within Kumar so as to improve handover processing without drop in communications of a traversing mobile unit from one station to another.

Regarding claim(s) 44 Kumar discloses a general CDMA system for generic handoff processing (Fig. 9), Examiner takes official notice that BSC- BTS signaling interface is fundamental within a wireless network (see USP 6771621 as example).

Response to Arguments

Applicant's arguments with respect to claims 15-18, 25-27 and 29-51 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RAJ JAIN whose telephone number is (571)272-3145. The examiner can normally be reached on M-TH.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Raj K. Jain/

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